

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

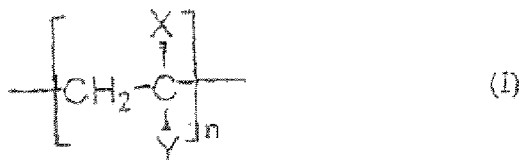
1. (Previously Presented) A product, or gas-associated form thereof, for use as blood substitute or depolluting agent, said product comprising saline and a particle consisting essentially of a sequenced block copolymer which is non-covalently associated with a hemoprotein;

said particle consisting essentially of a core portion and a surface portion,

said core portion consisting essentially of a hydrophobic segment of formula (I) and said surface portion consisting essentially of an oligosaccharide or polysaccharide hydrophilic segment covalently linked via one of its ends to a single hydrophobic segment of formula (I), said core portion and said surface portion forming the sequenced block copolymer,

said hemoprotein being non-covalently associated with said surface portion;

wherein formula (I) has the following structure;



in which:

X represents CN,

Y represents a COOR' radical,

with R' representing a hydrogen atom, a linear or branched C₁ to C₂₀ alkyl group,

a linear or branched C₁ to C₂₀ alkoxy group, an amino acid radical, a mono- or polyhydroxylated acid radical or a C₅ to C₁₂ aryl or heteroaryl radical.

2. (Previously Presented) The product of claim 1, wherein the hemoprotein is a normal hemoprotein, a modified hemoprotein, or else a hemoprotein analogue in which the iron is substituted with another metal.

Claim 3. (Canceled)

Claim 4. (Canceled)

5. (Previously Presented) The product of claim 1, wherein the hydrophobic segment is a poly(alkyl cyanoacrylate).

6. (Previously Presented) The product of claim 1, wherein the hydrophilic segment is a natural or synthetic oligosaccharide or polysaccharide, that may or may not be modified.

Claim 7. (Canceled)

8. (Previously Presented) The product as claimed in claim 1, characterized in that it is provided in the form of particles of 1 nm to 1 mm.

9. (Previously Presented) The product as claimed in claim 8, characterized in that it is provided in the form of nanoparticles.

10. (Previously Presented) A method of therapeutically treating a human or animal with a blood substitute comprising administering a product of claim 1 to a human or animal in need thereof with a therapeutically effective amount of said product.

Claims 11-14. (Canceled)

15. (Previously Presented) The product of claim 6, wherein the oligosaccharide or polysaccharide is dextran or heparin.

16. (Previously Presented) The product of claim 15, wherein dextran is sulfated.

Claims 17-18. (Canceled)

19. (Previously Presented) A composition comprising a product of claim 1, in the form of nanoparticles, and a vehicle.

20. (Previously Presented) The product of claim 1 wherein R' is H or a linear or branched C₁ to C₂₀ alkyl group.

Claims 21-23. (Canceled)

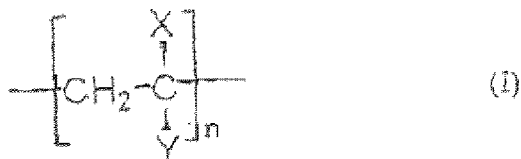
24. (New) A product, or gas-associated form thereof, for use as blood substitute or depolluting agent, said product comprising saline and a particle consisting essentially of a sequenced block copolymer which is non-covalently associated with a hemoglobin;

said particle consisting essentially of a core portion and a surface portion,

said core portion consisting essentially of a hydrophobic segment of formula (I) and said surface portion consisting essentially of an oligosaccharide or polysaccharide hydrophilic segment covalently linked via one of its ends to a single hydrophobic segment of formula (I), said core portion and said surface portion forming the sequenced block copolymer,

said hemoglobin being non-covalently associated with said surface portion;

wherein formula (I) has the following structure;



in which:

X represents CN,

Y represents a COOR' radical,

with R' representing a hydrogen atom, a linear or branched C₁ to C₂₀ alkyl group, a linear or branched C₁ to C₂₀ alkoxy group, an amino acid radical, a mono- or polyhydroxylated acid radical or a C₅ to C₁₂ aryl or heteroaryl radical.

25. (new) The product of claim 24, wherein the hydrophobic segment is a poly(alkyl cyanoacrylate).

26. (new) The product of claim 24, wherein the hydrophilic segment is a natural or synthetic oligosaccharide or polysaccharide, that may or may not be modified.

27. (new) The product as claimed in claim 24, characterized in that it is provided in the form of particles of 1 nm to 1 mm.

28. (new) A method of therapeutically treating a human or animal with a blood substitute comprising administering a product of claim 24 to a human or animal in need thereof with a therapeutically effective amount of said product.

29. (new) The product of claim 26, wherein the oligosaccharide or polysaccharide is dextran or heparin.

30. (new) The product of claim 29, wherein dextran is sulfated.